



AMENDMENTS TO THE SPECIFICATION

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**Technology Center 2100**

IN THE TITLE OF THE INVENTION:

Please amend the title, as it appears on the first page of the specification and in the U.S. Patent and Trademark Office's records, as follows:

--SYSTEM AND METHOD FOR DIAGNOSING SOFTWARE USING PRODUCTION WEIGHT--

IN THE SPECIFICATION:

Please amend paragraph [0002] as follows:

--[0002] The invention relates to a system and method for software diagnosis, and in particular, a software ~~diagnosis~~ diagnosing system and method which calculates the production weight of an event ~~based~~ basing on the ratio of each program segments ~~in~~ to the software and on the relationship of the software segments and the event and generates the event ~~based on the~~ according to its respective production weight.--

Please amend paragraph [0009] as follows:

--[0009] The invention is characterized in that the system generates an event for software testing ~~based~~ basing on the ratio of a program segment ~~in~~ to the software.--

designer to save time in software testing and enables complete testing with respect to the important functions of the software.--

Please amend paragraph [0020] as follows:

--[0020] In the preferred embodiment, the event ratio-calculating module 11 calculates a production weight 13 of each event ~~based~~ basing on the ratio of each program segment ~~in~~ to the un-debugged software and the relation of each program segment and each event. The production weight 13 is an index of importance of the event in the software in terms of program segments usage; the higher the production weight 13 is, the more the corresponding event uses important functions. The event-generating module 12 ~~having-generating~~ generates each event to diagnose the un-debugged software 11 ~~based~~ basing on the production weight 13 of each event.--

Please amend paragraph [0021] as follows:

--[0021] In the preferred embodiment, the event ratio-calculating module 11 automatically produces the ratio of the individual program segment ~~in~~ to the un-debugged software 2, and the ratio of the individual event with respect to ~~in the~~ each related program segment is automatically produced by the event ratio-calculating module 11 so as to calculate the production weight 13 of the individual event. Alternatively, the ratio of the

Please amend paragraph [0010] as follows:

--[0010] To achieve above objective, the system according to the invention is characterized in that the system includes an event ratio-calculating module and an event-generating module. The system is used to diagnose un-debugged software, and the un-debugged software includes a plurality of program segments and each program segment is related to at least one event. The event ratio-calculating module calculates the production weight of the individual event ~~based~~ basing on the ratio of the individual program segment ~~in~~ to the un-debugged software, and the relationship of the individual event and the individual program segment. The event-generating module generates individual events ~~based~~ basing on the production weight of the individual event so as to diagnose the un-debugged software.--

Please amend paragraph [0013] as follows:

--[0013] Since the system and method for software diagnosis according to the invention generates the events according to the production weights of the ~~program segments~~ individual events, the system and method can test the software automatically and completely, and the more important a program segment is, the more events it receives. Thus, the system and method allow the software

program segment ~~in~~ to the un-debugged software 2 and the ratio of the event with respect to ~~in the~~ each related program segment can not only be automatically produced by the event ratio-calculating module 11, but can also be produced by manual input of ~~the~~ an user 3.--

Please amend paragraph [0022] as follows:

--[0022] For instance, as shown in FIG. 2, the ratios of the first program segment 211, the second program segment 212, and the third program segment 213 ~~in~~ to the un-debugged software 2 are respectively 10%, 30%, and 60%. The first program segment 211 is related to the first event 221, the second event 222, and the third event 223. The ratios of the first event 221, the second event 222, and the third event 223 ~~in~~ with respect to the first program segment 211 are respectively 20%, 40%, and 40%. The second program segment 212 is related to the third event 223, the forth event 224, and the first event 225. The ratios of the third event 223, the forth event 224, and the fifth event 225 ~~in~~ with respect to the second program segment 212 are respectively 30%, 30%, and 40%. The third program segment is related to the first event 221, the third event 223, and the first event 225. The ratios of the first event 221, the third event 223, and the fifth event 225 ~~in~~ with respect to the second program segment 212 are respectively 30%, 50%, and 20%. Accordingly, the event ratio-calculating module 11 generates

the production weight 13 of the individual event for the un-debugged software 2 ~~based~~ basing on the above data as follows: the first event 221 is 20%, the second event 222 is 4%, the third event 223 is 43%, the forth event 224 is 9%, and the fifth event 225 is 24%.--

Please amend paragraph [0030] as follows:

--[0030] After the relationship of the individual program segments and the events are confirmed, distribute the weight ~~based~~ basing on the importance of the individual program segments in the entire PDA application program and the importance of the individual events in the individual program segments. Referring to FIG. 3, the method 4 for software diagnosis first determines in step 401 whether to automatically calculate the ratio 404 of the individual program segment ~~in~~ to the un-debugged software 2 by step 402 or to manually calculate the ratio 404 of the individual program segments ~~in~~ to the un-debugged software 2 by step 403. Next, in step 405, the method 4 determines whether to automatically calculate the production weight 408 of the individual event ~~based~~ basing on step 406 or to manually calculate the production weight 408 of the individual events ~~based~~ basing on step 407.--

. Please amend paragraph [0034] as follows:

--[0034] In view of the above, the system and method for software diagnosis according to the invention produce events for software testing ~~based~~ basing on the ratios of the individual program segments of the un-debugged software in the software, and the ratios of the events ~~in~~ with respect to the individual program segments. The software can be automatically and fully diagnosed, and to focus diagnosis on the important functions of the software based on the ratios of the individual program segments in the software. Thus, the software designer can save time in software testing so as to effectively and systematically diagnose software.--